

TITLE V PERMIT TO OPERATE  
CONOCOPHILLIPS - SANTA MARIA FACILITY

**STAFF REPORT**

PERMIT RENEWAL, APPL# 3322, and  
NON-FEDERAL MINOR CHANGES, APPL#s 3347 & 3380

April 9, 2003

## **I. Background**

The ConocoPhillips Company currently holds a Title V permit to operate (44-18) for the Santa Maria Facility that is due to expire on April 1, 2003. In accordance with District Rule 216, Federal Part 70 Permits, they have submitted application number 3322 and requested that the permit be reissued for another five-year term. In addition, application numbers 3347 and 3380 for non-federal minor changes have been submitted to correct certain sulfur pelletizing operation parameters and diesel fuel specifications; neither application involves actual equipment or process changes. This engineering evaluation is intended to assess the adequacy of those applications and to explain the District's approach in composing the propose Title V permit.

Four new federally applicable requirements must be incorporated into the reissued permit. A maximum achievable control technology (MACT) standard, 40CFR63, subpart UUU, was promulgated in early-2002 and will affect sulfur plant operations, particularly whenever the tail gas unit is undergoing maintenance. Two proposed MACT standards, one for boilers and heaters, and one for storage tanks, are expected to affect the refinery when they are finalized. In addition, the Compliance Assurance Monitoring (CAM) regulation, 40CFR64, was promulgated in late-1997 and will require the implementation of compliance plans for two emission points at the carbon plant. Note that CAM did not apply to this permit's original issuance in early-1998 because the application for that action was deemed complete prior to promulgation of the CAM regulation (40CFR64.5.a.1.ii).

The District is also taking this opportunity to include some administrative changes in the reissued permit. A District-only enforceable prohibitory rule for architectural coatings was adopted in early-2002 and is now applicable. Appendix B to the permit, concerning alternative testing methods, will be updated to reflect the most recent listing available from the Air Resources Board. Continuous monitor relative accuracy test methods and criteria will be updated to reflect changes in EPA's underlying regulations. Biennial testing will replace triennial testing for certain pollutants to reflect the Compliance Monitoring Strategy (CMS) agreement recently reached between the District and EPA Region IX. In addition, several non-substantive changes were adopted to Rule 216 in March 2001 that will now be reflected in the permit. Minor textual changes will also be made to the introductory convention section and various other areas of the permit.

Application 3322 was received on October 15, 2002, which was well before the application deadline of November 1, 2002. An amended Compliance Certification Report was received on October 30 and the application was deemed complete as of that date in the District's letter to ConocoPhillips dated November 27, 2002. Application 3347 was submitted on November 20, 2002, and found to be complete upon receipt as indicated in that same letter. Application 3380 was received on January 28, 2003, found incomplete in a letter dated January 30, 2003, and then found complete following the submittal of additional information on February 18, 2003.

The District's approach to the Title V program is to issue a single permit for the entire facility that satisfies both the federal requirement for a permit under Rule 216 and the District's requirement for a permit under Rule 202, Permits. All federal, state, and District requirements associated with the emission of air contaminants are intended to be included in that combined permit. Any document, which is not readily available to the public and is necessary to support an applicable federal requirement, will be included as an appendix. The District has taken the approach that all of the following documents are readily available to the public and, therefore, will not be included: Code of Federal Regulations, California Code of Regulations and Health and Safety Code, District Rules and Regulations (both those which are current and those which appear in the California State Implementation Plan), District agreed

upon compliance plans not necessary to support an applicable federal requirement (copies of which are available at the refinery and at the District's office), and all test methods.

The refinery and carbon plant have historically been considered separate sources. Primarily because they were owned by different companies when their original permits were issued in the late 1970's. However, they are now owned and controlled by the same company, are intimately supported by one another, share a common boundary, and have the same major category Standard Industrial Classification (SIC) Code of 29 (the refinery SIC code is 2911 and the carbon plant SIC code is 2999). Their combined actual emissions of oxides of nitrogen (NO<sub>x</sub>) exceed 100 tons per year and the carbon plant's hydrogen chloride emissions (a Hazardous Air Pollutant or HAP) exceed 10 tons per year. Consequently, they are considered a single major source for both criteria and HAP emissions.

The administrative requirements for reissuing this permit are those for a significant permit action. Consequently, a 30-day public comment period, affected state notification, and 45-day EPA review were required and were performed concurrently. There are no administrative requirements for the non-federal minor change actions. Note that the administrative changes to the text introduced above and explained in more detailed below are not considered a District reopening because this is basically a new permit action.

**II. Compliance with Rule 216:** A section-by-section evaluation of compliance with all pertinent requirements of this rule follows. Requirements are listed by rule section and are shown in normal text. This evaluation's comments are shown in bold text.

- B. Applicability. **ConocoPhillips is subject to the requirement to obtain a Title V permit because their actual emissions exceed the major sources thresholds: 100 tons per year of a criteria air pollutant: NO<sub>x</sub>, SO<sub>2</sub>, PM-10; and 10 tons per year of a hazardous air pollutant: HCL. The facility is also subject to the Refinery MACT standards of 40CFR63 subparts CC and UUU because of their HCL emissions. In addition, ConocoPhillips has stipulated that they are a major source for criteria pollutants and HAPs in their application.**

**2002 Tons per Year Actual Emissions**

NO <sub>x</sub>	SO <sub>2</sub>	PM-10	HCL
104	3740	119	46

E. Requirements - Application Contents

1. Required Information for a Part 70 Permit. A complete application for a Part 70 permit shall contain all the information necessary for the APCO to determine compliance with all applicable requirements. The information shall, to the extent possible, be submitted on standard application forms available from the District. **The application contained all of the listed information and was deemed complete upon receipt, see attachment A to this evaluation. The District's standard forms were used.**
5. Certification by Responsible Official. Any Part 70 permit application shall be certified by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **The original application was certified to be true, accurate, and correct by James O. Anderson who is the responsible official for ConocoPhillips.**

F. Requirements - Permit Content

1. Each Part 70 permit shall include the following elements:

- a. Conditions that will assure compliance with all applicable requirements, including conditions establishing emission limitations and standards for all applicable requirements. **All applicable requirements are included in the proposed permit. See section IV of evaluation for Periodic Monitoring discussion.**
  - 1) With the exception of acid rain program requirements, where any two or more applicable requirements are mutually exclusive, the more stringent shall be incorporated as a permit condition and the other(s) shall be referenced. **Several applicable requirements were streamlined, see below, and referenced in the permit.**
- b. The term of the Part 70 permit. **See condition III.A.8.**
- c. Conditions establishing all applicable emissions monitoring and analysis procedures (**see condition III.C.8**), emissions test methods or continuous monitoring equipment required under all applicable requirements (**see condition III.D.9**); and related recordkeeping and reporting requirements (**see condition section III.B**).
  - 3) Records of required monitoring information that include the following: (**see condition III.D.1**)
    - i. The date, place as defined in the permit, and time of sampling or measurements;
    - ii. The date(s) analyses were performed;
    - iii. The company or entity that performed the analyses;
    - iv. The analytical techniques or methods used;
    - v. The results of such analyses; and
    - vi. The operating conditions as existing at the time of sampling or measurement.
  - 4) All applicable records shall be maintained for a period of at least 5 years. **See condition III.B.**
  - 5) All applicable reports shall be submitted every 6 months and shall be certified by a responsible official. **See condition III.B.4.c.**
    - i. All instances of deviations from permit requirements must be clearly identified. **See condition III.B.4.c.3.**
- e. A severability clause to ensure the continued validity of the various Part 70 permit requirements in the event of a challenge to any portions of the Part 70 permit. **See condition III.A.6.**
- f. A statement that the permittee must comply with all conditions of the Part 70 permit and that any permit noncompliance constitutes a violation of the CAA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. **See condition III.A.2.a.**
- g. A statement that the need for a permittee to halt or reduce activity shall not be a defense in an enforcement action. **See condition III.A.2.b.**
- h. A statement that the Part 70 permit may be modified, revoked, reopened, and reissued, or terminated for cause. **See condition III.A.2.c.**
- i. A statement that the Part 70 permit does not convey any property rights of any sort, or any exclusive privilege. **See condition III.A.2.d.**
- j. A statement that the permittee shall furnish (information) to the permitting authority.... **See condition III.A.2.e.**
- k. A condition requiring the permittee pay fees due to the District consistent with all applicable fee schedules. **See condition III.A.9.**
- l. A provision stating that no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. **See condition III.A.2.k.**
- m. Applicable conditions for all reasonably anticipated operating scenarios identified by the source in its Part 70 permit application. **See section III.H.**

- n. Applicable conditions for allowing trading under a voluntary emission cap accepted by the permittee to the extent that the applicable requirements provide for such trading without a case-by-case approval of each emissions trade. **ConocoPhillips did not request an emission cap in their application.**
- o. Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventive measures taken. **See conditions III.A.3 and III.B.3.g.**
- p. For any condition based on a federally-enforceable requirement, references that specify the origin and authority for each condition, and identify any difference in form as compared to such federally-enforceable requirement. **See convention A.1.**
- 2. Each Part 70 permit shall include the following compliance requirements:
  - a. Inspection and entry requirements that require that the permittee shall allow the District to perform the following... **See condition III.A.5.**
  - b. A schedule of compliance consistent with Subsection L.2. **See condition section III.F.**
  - d. A requirement that the permittee submit compliance certification pursuant to Subsection L.3. **See condition III.B.4.d.1.**
- 3. Federally-enforceable requirements. All conditions of the Part 70 permit shall be enforceable by the EPA and citizens under the CAA unless the conditions are specifically designated as not being federally-enforceable and, therefore, a District-only requirement. **See condition III.A.2.h.**
- G. Requirements - Operational Flexibility
  - 2. Alternative Operating Scenarios. The owner or operator of any stationary source required to obtain a Part 70 permit may submit a description of all reasonably anticipated operating scenarios for the stationary source as part of the Part 70 permit application. **See section III.H.**
- H. Requirements - Timeframes for Applications, Review, And Reissuance
  - 1. Significant Part 70 Permit Actions
    - a. Timely Submission of Applications. Any stationary source required to obtain a Part 70 permit pursuant to Section B shall submit an application for such permit in the following manner:
      - 5) For any stationary source that is applying for reissuance of a Part 70 permit, an application for a Part 70 permit shall be submitted to the District no more than 18 months prior to the expiration date and no less than six (6) months prior to the expiration date of the Part 70 permit. **A complete application was received on October 30, 2002, which was just prior to the deadline of November 1, 2002.**
    - b. Completeness Determinations. The APCO shall provide written notice to an applicant regarding whether or not a Part 70 permit application is complete. **ConocoPhillips was notified on November 27, 2002, that their application was complete.**
    - c. Action on Applications. The APCO shall take final action on each complete Part 70 permit application as follows:
      - 4) Except for applications listed pursuant to Subsections H.1.c.1 through 3 (**not applicable to a reissuance**), the APCO shall take final action on an application by no later than 18 months after the receipt of such complete application. **The APCO intends to take final action on or about April 7, 2003.**
- I. Requirements - Permit Term and Permit Reissuance
  - 1. All Part 70 permits shall be issued for a fixed term of 5 years from the date of issuance of the permit by the District. **See condition III.A.8.**
  - 4. If a timely and complete application has been submitted, then the Part 70 permit shall not expire, and all conditions of the permit shall remain in effect, until the permit has been reissued or denied. **The current version of the permit (44-18) is due to expire on April 1, 2003, but a timely and complete application has been received as noted above. Final action on**

**permit 44-23 is intended on or about April 7, 2003. Consequently, the “permit shield” provisions of this section (Rule 216.I.4) apply and allow ConocoPhillips to be considered in compliance with the Title V permit requirement between those two dates.**

J. Requirements - Notification

1. Public Notification

- a. The APCO shall publish a notice, as specified in Subsection J.1.b, of any preliminary decision to grant a Part 70 permit, if such granting would constitute a significant Part 70 permit action. **Done**
- b. Any notice of a preliminary decision required to be published pursuant to Subsection J.1.a shall:
  - 1) Be published in at least one (1) newspaper of general circulation in San Luis Obispo County, by no later than ten (10) calendar days after such preliminary decision. **Notice was published on February 24, 2003, in the Telegram Tribune, which is a newspaper of general circulation in the District.**
  - 2) Be provided to all persons on the Part 70 permit action notification list. This list shall include any persons that request to be on such list. **No one has requested to be included on a Part 70 notification list.**
  - 3) Be provided by other means as necessary to assure adequate notice to the affected public. **Nothing beyond the standard newspaper notice is warranted.**
  - 4) Include the following:
    - i. Information that identifies the source, and the name and address of the source.
    - ii. A brief description of the activity or activities involved in the Part 70 permit action.
    - iii. A brief description of any change in emissions involved in any significant Part 70 permit modification. **See attachment E for text of public notice.**
  - 5) Include the location where the public may inspect the information required to be made available pursuant to Subsection J.1.c. **See attachment E.**
  - 6) Provide at least 30 calendar days from the date of publication for the public to submit written comments regarding such preliminary decision. **See attachment E.**
  - 7) Provide a brief description of comment procedures including procedures by which the public may request a public hearing, if a hearing has not been scheduled. The APCO shall provide notice of any public hearing scheduled pursuant to this subsection at least 30 calendar days prior to such hearing. **See attachment E.**
- c. The APCO shall, by no later than the date of publication, make available for public inspection at the District office the information submitted by the applicant and the APCO's supporting analysis for any preliminary decision subject to the notification requirements of Subsection J.1.a. **Done**
- d. The APCO shall maintain records of the those who comment and issues raised during the public participation process. **No comments to date.**
- e. The APCO shall only consider comments regarding a preliminary decision to grant a Part 70 permit if the comments are germane to the applicable requirements implicated by the permit action in question. Comments will only be germane if they address whether the permit action in question is consistent with applicable requirements, requirements of this rule, or requirements of 40 CFR Part 70. In addition, comments that address a portion of a Part 70 permit that would not be affected by the permit action in question would not be germane. **No comments to date.**

2. EPA Notification

c. Significant Part 70 Permit Actions

- 1) The APCO shall, by no later than the date of publication specified pursuant to Subsection J.1.b.1, provide to the EPA, affected states, and any person that requests

such information a copy of any notification made pursuant to Subsection J.1.a, and the supporting data and analysis relating to any such preliminary decision. **Notification to EPA occurred via overnight mail service that was scheduled to be delivered on February 19, 2003. Notification to affected states occurred via e-mail on February 20, 2003, which was prior to the newspaper notice date of February 24, 2003. To date, no individuals, groups, or companies have requested to be notified of Title V permit actions.**

- 3) The APCO shall provide written notification of the final decision to grant or deny a Part 70 permit to EPA, and any person and/or agency that submitted comments during the comment period. **This is the APCO's intent.**

K. Requirements - Reopening of Permits

1. Reopening of Part 70 Permits for Cause. Each issued Part 70 permit shall include provisions specifying the conditions under which the permit will be reopened prior to the expiration of the permit. **See condition III.A.2.c.**

L. Requirements - Compliance Provisions

1. Permit Required and Application Shield. No stationary source required to obtain a Part 70 permit shall operate after the date it is required to submit a timely and complete permit application except in compliance with its Part 70 permit or under one of the following conditions:
  - a. When a timely and complete Part 70 permit application has been submitted, the stationary source may continue to operate until the Part 70 permit is either issued or denied. This provision does not allow the stationary source to operate in violation of any applicable requirement. **A complete and timely application for the initial Title V permit was submitted on October 30, 2002.**
2. Compliance Plans. A compliance plan must be submitted with any Part 70 permit application. The compliance plan shall contain all of the following information: **See application section III (page 10).**
  - a. A description of the compliance status of the source with respect to all federally-enforceable requirements.
  - b. For federally-enforceable requirements with which the source complies, the plan must state that the source will continue to comply.
  - c. For federally-enforceable requirements that will become effective during the Part 70 permit term, the plan must state that the source will comply with such requirements in a timely manner.
    - 1) A detailed schedule shall be included for compliance with any federally-enforceable requirement that includes a series of actions.
3. Compliance Certification. All permittees and applicants must submit certification of compliance with all applicable requirements and all Part 70 permit conditions. A compliance certification shall be submitted with any Part 70 permit application and annually, on the anniversary date of the Part 70 permit, or on a more frequent schedule if required by an applicable requirement or permit condition. **The application contained a compliance certification and the annual requirement appears in condition III.b.4.d.1.**
4. Document Certification. Any Part 70 permit application and any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **The application contained a document certification and the on-going requirements appear in conditions III.B.4.b,c,&d.**
6. Permit Shield

- a. Compliance with all of the conditions of a Part 70 permit shall be deemed compliance with any applicable requirements as of the date of issuance of the Part 70 permit, provided that the Part 70 permit application specifically requests such protection and one of the following conditions is satisfied:
- 1) Such applicable requirements are included and specifically identified in the Part 70 permit ... **See condition section III.G.**

**III. Permit History:** The initial Title V permit for this facility was issued in February 1998 with an effective date of April 1, 1998. Since then, the permit has been partially or wholly reissued eight times to incorporate various modifications. The following table presents a summary of those revisions.

### Application History

PTO	Date	Issued under Appl	Incorporated Appl	Type	Description
T-3031-A-1	Feb-98	2104	2104	initial issuance	
			2109	non-federal minor	incorporate coke dedusting systems
44	Feb-99	2579	2579	non-federal minor	alternative recording for TGU combustor
					maintenance shutdown of MgOH system
					product elevator bypass use for calibration
			2580	federal minor	bubble heater fuel use limits, monthly HHV testing
					alternative test methods
					add Title VI as appl req for refrigeration systems
					test method for HAP content of crude oil
			none	reopening	R431 applicability to 4 DICE
					seal inspection reporting
					MACT revisions
					B505 availability for plant utilities
					timing of inspections and reporting
44-7	Jan-00	2821	2821	federal minor	increase B-2 heat input limits
			2788	non-federal minor	incorporate regenerative crystallizer
			2876		allow use of B505 steam for utility plant
44-8	Apr-00	2934	2934	administrative	change recordkeeping
44-10	Jun-00	2968	2968	non-federal minor	various clarifications
44-11	Nov-00	2973	2973	significant	change to electronic recordkeeping
			2991	non-federal minor	temporary flare alternative operating scenario
			none	reopening	add drains and standby engine for reverse osmosis unit
					amend tail gas unit monitoring reference
					add portable equipment provision

(continued)



## Application History (continued)

PTO	Date	Issued under Appl	Incorporated Appl	Type	Description
44-14	Jan-01	3042	3042	administrative	change EPG rating
44-16	May-02	3111	3111	non-federal minor	firewater pump engine replacement
44-18	Nov-02	3118	3118	non-federal minor	minor textual and recordkeeping changes, several requests were denied
			3117	administrative	various typographical and textual changes

**IV. Streamlining of Applicable Requirements:** The following federally-enforceable limits are encompassed as subordinate to District-only requirements. This subordination is termed "subsumed" by EPA. This streamlining of requirements is intended to follow the guidance provided in section II.A.2.d, second bullet, of EPA's White Paper Two, dated March 5, 1996 (see attachment B). The subsumed requirements appear in the Permit Shield section of this permit. Through this streamlining action, applicable requirements that were previously District-only requirements become federally-enforceable if any subsumed requirement is federally-enforceable.

Streamlining selects the most stringent emission limitation or work practice standard. The respective recordkeeping, reporting, and monitoring (RRM) requirements associated with that limitation or standard are presumed to be adequate to show compliance. This procedure is in accordance with section II.A.2.e of White Paper Two. In the spirit of that guidance, it is not the intent of this evaluation to "cherry-pick" among the RRM requirements to apply the most stringent RRM among the subsumed requirements.

1. Storage tanks. SIP Rule 407 only applies to petroleum product tanks with a TVP of 1.5 psia and infers that "gasoline" and "petroleum distillates" are example products. The refinery ships pressure distillate and gas oil as intermediate products for further refinement elsewhere. Both materials are obtained by distillation but the gas oil has a TVP of <1.5 psia. The pressure distillate has traditionally been considered (and will still be considered) subject to SIP Rule 407. Slop oil (or recovered oil) is reprocessed in the refinery, crude oil is a raw material, and gas oil has a low vapor pressure so these three materials have traditionally not been considered (and will continue to not be considered) subject to SIP Rule 407. This means that Tanks 100 & 101 (slop oil); 800 & 801 (gas oil); and 900, 901, & 903 (crude oil) are not subject to those requirements and that Tanks 550 & 551 (pressure distillate) are subject.

### Storage Tank Applicable Requirements Matrix

Tank	Type	Mtr'l	206	SIP 407	425	Kb	CC	stream-lined	D-only	fed-enf
									either - or	
100/1	dome	slop oil			E.3				X	
550/1	dome	PD		A.2	<b>E.3</b>			X		X
800/1	single	gas oil	X						X	
900/1	double	crude			E.1				X	
903	double	crude			<b>E.1</b>	X		X		X

- a. Tanks 550 & 551, process A-1, are required by federally-enforceable SIP Rule 407.A.2 to employ a vapor recover system that is capable of preventing the release of vapors to the atmosphere. This requirement will be subsumed by the District Rule 425.E.3 requirement to employ a vapor recovery system which vents to the refinery's fuel gas system as indicated in condition II.B.1.d. A second requirement of SIP Rule 407.A.2 requires that all gauging and sampling ports be maintained gas-tight. This requirement will be subsumed by the Rule 425.E.3.a requirement to maintain those ports tightly closed and gas-tight as indicated in condition III.C.5.b.
- b. Tank 903, process A-1, is subject to federally-enforceable 40CFR60, subpart Kb, and required to employ a floating roof with double seals. ConocoPhillips also initially considered it subject to the MACT standard (subpart CC) in their original compliance plan. Upon further review, this evaluation is in agreement with ConocoPhillips that this tank is not subject to the MACT because it does not contain >4% HAP compounds. Tanks 900 and 901, process A-1, were similarly considered subject to the MACT initially. This evaluation is in agreement with ConocoPhillips that these tanks are, indeed, not subject to those requirements for the lack of >4% HAPs (see results of 2002 analysis in attachment B). The subpart Kb requirements for tank 903 will be subsumed by the Rule 425.E.1 requirement to employ double seals as indicated in condition III.E.1.b.1.i.

- 1) The primary seal gap requirement of Rule 425 is more stringent than section 60.113b.b.4.i which limits gaps to no more than 1-1/2 inch with the total area not to exceed 10 in<sup>2</sup>/ft of circumference. The following equation states the Rule 425 limits, as they appear in condition III.E.1.a.1&2, in those same units:

Rule 425 allowed primary seal gap = (1.5 inch max and not to exceed 10% of circ.) + (1/2 inch not to exceed 40% of circ.) + (1/8 inch for the remainder)

$$(1.5\text{in} \cdot 12\text{in}/\text{ft} \cdot 0.1) + (0.5\text{in} \cdot 12\text{in}/\text{ft} \cdot 0.4) + (0.125\text{in} \cdot 12\text{in}/\text{ft} \cdot 0.5) = 4.95 \text{ in}^2/\text{ft}$$

- 2) The zero gap secondary seal requirement of Rule 425 (which Tanks 900, 901, and 903 are subject to) is more stringent than 40CFR60, subpart Kb, which limits gaps to no more than 1/2 inch with the total area not to exceed 1.0 in<sup>2</sup>/ft of circumference. Assuming welded shells are constructed with 5 weld seams per 100 foot of tank diameter and the Rule 425 gap allowance is further restricted to 1/2 inch, the following equation states the Rule 425 limit, as it appears in condition III.E.1.a.4, in Subparts Kb units:

Rule 425 allowed secondary seal gap = (1/2 inch not to exceed 4 inches per weld seam) \* (5 seams per 100 foot of circumference)

$$(0.5 \text{ in} \cdot 4 \text{ in}/\text{seam}) \cdot (5 \text{ seams}/100 \text{ ft}) = 0.1 \text{ in}^2/\text{ft}$$

- 3) The floating roof appurtenance design requirements of Rule 425.F are considered "work practice requirements" as described in section II.A.2.b of White Paper Two. With the exception of section 425.F.7.b, all of those requirements are considered as not supporting the seal gap requirements discussed above and, therefore, will remain as District-only requirements. The 425.F.7.b primary shoe gap limit of 3 inches will be considered as supporting the seal gap requirements and will be considered federally-enforceable as indicated in condition III.E.1.a.3.

- 4) The floating roof with double seal requirements of 40CFR60.112b.a.2 (Tank 903) and 425.E.1 are considered “work practice requirements” as described in section II.A.2.b of White Paper Two. They will be considered as supporting the seal gap requirements and will be considered federally-enforceable as indicated in condition III.E.1.b.1.i.
  - 5) The work practice requirements in 40CFR60.113b.b.4.i specifies that primary seal mechanical shoes extend into the stored liquid, that those shoes also extend a given distance above the liquid surface, and that there be no holes, tears, or other openings in the primary shoe or the primary and secondary seal fabric or seal envelope. The fact that a seal shoe must be designed and installed to extend a given distance above and below the stored liquid surface has no bearing on the gap that results between that seal and the tank wall. The zero tolerance, “no hole or opening,” requirement is quite incompatible with the concept of an allowed gap and, therefore, also has no bearing on the gap criteria. Consequently, the New Source Performance Standard (NSPS) requirements will not be considered as supporting Tank 903's seal gap requirements and will not be included as federally-enforceable requirements.
  - 6) The work practice requirements in 40CFR60.112b.a.2.iii that the floating roof not be allowed to rest on its support legs, except during specific situations, and that liquid transfers be continuous, will not be considered as supporting the seal gap requirements for Tank 903. Consequently, the corresponding Rule 425.E.1 and C.3.b requirements in conditions III.E.1.b.3 & 4 respectively will be applied as “District-only.”
  - 7) The work practice requirement in 40CFR60.112b.a.2.ii that the slotted guide pole be fitted with a seal was the subject of a Consent Decree issued by a federal court (USA vs. Unocal, civil #95-3980, DOJ #90-5-2-1-2002). The refinery complied with that requirement with the installation of a “green sleeve,” which eliminates any gaps in or around the pole. Consequently, the corresponding requirement in this permit under condition III.E.1.b.1.iv will be considered federally enforceable for Tank 903. In addition, condition III.E.1.b.1.v will be clarified that no gap is allowed at Tank 903's guide pole.
- c. The inspection frequencies for Tank 903 associated with District Rule 425 are as, or more, stringent than those in 40CFR60 subpart Kb with the following exceptions:
- 1) Rule 425.G.7.b allowance for inspection of the primary seal every ten years when a zero-gap secondary is used (Tanks 900, 901, and 903 have zero-gap secondary seals). However, Rule 425.G.6 also calls for the primary seal to be inspected annually at four locations as selected by the APCO. Inspection sites are selected on the basis of a perceived possibility of primary seal gaps. 40CFR60.113b.b.1.i requires that the primary seal be inspected every five years. Due to the wear and tear caused by the inspection of a primary seal below a zero gap secondary seal, the combination of the less frequent Rule 425 full seal monitoring requirement and the more frequent Rule 425 spot check monitoring is judged to assure compliance to the same extent as the subsumed subpart Kb monitoring frequency. Consequently, in accordance with section II.A.2.e of White Paper Two, the subpart Kb monitoring requirements will not be considered to apply.
  - 2) 40CFR60.113b.b.1.i requires that the primary seal be inspected during hydrostatic testing or within 60 days of initial filling with a volatile organic liquid. Subsection 113b.b.6 also calls for an inspection whenever a tank is emptied and degassed. Whether or not these work practice requirements are considered to directly support the NSPS gap criteria was a

point of discussion between EPA and District staff. The District eventually felt that the guidance in section II.A.2.b of White Paper Two was sufficiently unclear to agree with EPA. The first bullet of that section to the White Paper states,

“A work practice requirement directly supporting an emission limit (i.e., applying to the same emission point(s) covered by the emission limit) is considered inseparable from the emission limit... .”

EPA believes that the NSPS seal inspections fit this definition because a seal gap is the emission point of concern and the inspection would be for the purposes of measuring that gap. The consequence of considering the gap criteria and inspections to be inseparable is to make federally-enforceable any similar inspections performed under an otherwise District-only requirement. Therefore, the following requirements will be held as federally-enforceable under Rule 206 and the District's ability to place permit conditions for Tank 903. The corresponding NSPS sections will be included in the Permit Shield because subpart Kb will not apply except as a subsumed requirement.

- i. Condition III.C.4.h requires that a tank's fittings and seals be inspected whenever the tank is emptied and degassed.
  - ii. Condition III.C.4.i requires that a tank's seals be inspected whenever the roof is refloated.
- d. The inspection technique requirements of 40CFR60.113b.b.2 apply to Tank 903 and contain specific seal gap measuring rod dimensions and usage procedures. The standard District practice is to inspect seals using appropriately sized measuring rods and in a similar manner as described in subpart Kb. These inspection techniques go hand-in-hand with the inspection frequencies discussed in item III.1.c.2 above. Consequently, they too will be considered federally enforceable for Tank 903 and included in the Permit Shield. See condition III.C.4.j.
2. Tail Gas Unit. This unit is subject to 40CFR60 subpart J. Two of the federal limits, 300 ppm total reduced sulfur compounds (TRS) and 10 ppm hydrogen sulfide (H<sub>2</sub>S), were included in previous permit conditions and need not be streamlined. When the tail gas combustor is on, however, the District's 100 ppm sulfur dioxide (SO<sub>2</sub>) limit is more stringent than the federal limit of 250 ppm. Both limits are corrected to 0% O<sub>2</sub>. Consequently, in accordance with section II.A.2.e of White Paper Two, the subpart J requirement will be subsumed to the District requirement.
3. B-506 boiler. This unit is subject to both Rule 430 and 40CFR60 subpart Db. The respective NO<sub>x</sub> emission limits are 0.036 lb/mmBtu and 0.2 lb/mmBtu. The latter limit is based on a high heat release rate of 127 mmBtuh/ 1448 ft<sup>3</sup> = 87,707 Btu/h/ft<sup>3</sup>. The Rule 430 limit is more stringent, therefore the requirements of subpart Db will be subsumed.

The subpart Db monitoring requirement calls for either a CEM (60.48b.b) or a predictive NO<sub>x</sub> emission program (60.48b.g.2). The latter calls for the monitoring of an operating parameter, on an hourly basis, that ensures compliance (60.49b.c.3). The continuous fuel usage and steam flow monitoring requirements of conditions III.B.1.c & d, the annual calibration of those monitors required by condition III.B.2.h, and the annual testing required by condition III.D.2 are judged to assure compliance to the same extent as the predictive NO<sub>x</sub> emission plan of subpart Db. Consequently, and in accordance with section II.A.2.e of White Paper Two, the subpart Db monitoring requirements, with the exception of 60.49b.c.3, will not be considered to apply. This

latter section, which requires hourly monitoring, is judged to already exist and will continue to exist under condition III.B.1.c. Therefore, in keeping with footnote 12 to section II.A.2.e of White Paper Two which requires that all existing monitoring be retained, 40CFR60.49b.c.3 will be cited as requiring the recordkeeping of condition III.B.1.c for the B-506 boiler.

Note that 40CFR40b.c defers to 40CFR60 subpart J for any B-506 SO<sub>x</sub> requirements.

4. Calcliner SO<sub>2</sub>. Sulfur dioxide emissions from the petroleum coke calciner “cold stack” are subject to both SIP Rule 114.1.a, 2000 ppmv, and federally-enforceable mutual settlement condition number 5B to Notice of Violation number 1308, 2000 ppmwv@12%O<sub>2</sub>dry (see item III.1 to the staff report for application number 2934, PTO 44-8). The latter is considered to be more stringent because it specifies an oxygen correction. Consequently, the SIP Rule 114.1.a requirement will be subsumed to the mutual settlement requirement.
- V. Periodic Monitoring.** If it is deemed necessary, the permit should include periodic monitoring conditions, to ensure compliance with all applicable federal requirements (reference Rule 216.F.1.a). Most NSPS or NESHAP requirements already contain provisions for periodic monitoring and need no further discussion. This section of the evaluation will discuss requirements that do not contain explicit monitoring.
1. SIP Rule 401, Visible Emissions (condition III.A.1.a). This rule limits emissions to 40% opacity. If warranted, periodic monitoring could be accomplished through in-stack opacity monitors or visible emission evaluations by certified observers. ConocoPhillips’ heaters and boilers are fueled by a relatively high energy value gas (1200 Btu/scf), which is a mixture of refinery make gas (RMG) and natural gas. Any visible emissions that might occur would result from incomplete combustion. A combustion efficiency analysis of the 2002 compliance testing performed at the refinery can be found in attachment B. All units achieved at least 99% efficiency and most achieved 99.9%. This is not unexpected because nearly all boilers and heaters now use new, lo-nox burners in response to District Rule 430, Control of NO<sub>x</sub> from Industrial Boilers and Process Heaters. Consequently, no visible emissions are expected to occur from these units and no periodic monitoring is proposed.
  2. SIP Rule 111, Nuisance (condition III.A.1.b). This rule prohibits the causing of a public nuisance. This rule stems from a similar regulation in the California Health and Safety Code (H&SC) and there is no corresponding federal requirement. While it currently appears in the SIP, it doesn't belong there. Reference ARB’s guidance dated January 12, 1999 (see attachment B), in which one of the types of rules not to be included in the SIP are, “2.a Regulations developed solely to control non-criteria pollutants such as ... nuisance ...” SIP Rule 111 is intended to prevent nuisance situations. It is not intended to control criteria air contaminants. Therefore, this rule will not be included as a federally-enforceable requirement in this permit. Rather, its present day counterpart in District Rule 402 will be included as a District-only requirement.

As a side note, the District's Hearing Board served the refinery with a conditional order of abatement in 1989 for odorous emissions in violation of the District’s counterpart to this rule. Significant improvements were installed under Unocal's Improvement and Modernization project to reduce those emissions and the order of abatement was lifted. Since those changes were made, the refinery has only been found in violation of Rule 402 once and that was due to odors from the coke cooling water storage tanks in 1994. Improvements to the tank surface skimmers and process changes to minimize floating oil in those tanks have proved adequate to ensure that the tanks

operate in compliance with the nuisance rule. Consequently, the refinery is not expected to create a nuisance through normal operations and is considered in compliance with Rule 402 at this time.

3. SIP Rule 113, Particulate Matter (condition III.A.1.c). This rule limits emissions to 0.3 gr/dscf and sliding scale amounts in lb/hr depending on process rate. If warranted, periodic monitoring could be accomplished through stack sampling and, for stacks controlled by a baghouse, a broken bag detector system. Indeed, the CAPCOA guidance for periodic monitoring adopted in June 1999 allows triboelectric type broken bag detection to satisfy periodic monitoring requirements for material handling plants (section E.2.b).

Combustion devices are not likely to exceed either of the concentration or mass emission limits of this rule for the same reason of their high combustion efficiency as noted above for SIP Rule 401. Consequently, no periodic monitoring for compliance with this rule is proposed for those emission points.

Three stacks at the carbon plant have the potential for exceeding this limit under normal operation and already have a periodic stack testing requirement: cold stack, cooler stack, and rail car loading baghouse. Indeed, emissions from the cold stack exceeded the lb/hr limitation during compliance testing in 1999 and 2001 (Notices of Violation 2144 & 2145 respectively). However, Compliance Assurance Monitoring (CAM) requirements under 40CFR64 (see below) are applicable to the cold stack and cooler stack. Under CAM, the cooler stack discharge will be monitored with a differential pressure indicator across the multiclone and the cold stack discharge will be monitored with a increase particulate matter (broken bag) detector. All other particulate matter sources are fugitive in nature and cannot be tested. Consequently, no additional periodic monitoring beyond CAM, or those efforts noted here, is proposed.

4. SIP Rule 114.1, Sulfur Dioxide (condition III.A.1.d.1). This rule limits sulfur compound emissions to 0.2% as sulfur dioxide. If warranted, periodic monitoring could be accomplished through in-stack continuous emissions monitoring, continuous or periodic fuel sulfur content monitoring, or stack sampling. The B-602 sulfur recovery unit incinerators are exempt from this requirement. All of the refinery's heaters and boilers are subject to the rather stringent limitations of NSPS, subpart J, and a continuous monitoring system, AN-603, ensures compliance by monitoring the refinery fuel gas. Weekly fuel samples are analyzed for total sulfur as well. H<sub>2</sub>S is a good indicator of the total sulfur content of the gas due to the nature of the sulfur removal processes involved. Periodic source tests of individual stacks are also performed. Although, the carbon plant cold stack has violated the 2000 ppm standard as recently as July 1995 and the compliance plan contained in Appendix A to the proposed permit resulted from that incident. The coke feed rate required to ensure compliance with that plan is monitored under condition III.B.1.h. In addition, the cold stack is tested for compliance annually. Consequently, no additional periodic monitoring is proposed.
5. SIP Rule 404.B, Sulfur Content of Fuels (condition III.A.1.d.2&3). This rule limits the sulfur content of gaseous fuels to 50 gr/100 dscf and liquid fuels to 0.5%. If warranted, periodic monitoring could be accomplished through continuous or periodic fuel sampling for sulfur content. As mentioned above, the refinery's fuel gas is continuously monitored for H<sub>2</sub>S and weekly samples are drawn for total sulfur analysis. The fuel gas also undergoes independent analysis annually. Very little liquid fuel is burned on site and the 0.5% sulfur content requirement is so standard through-out California that it is extremely unlikely that fuel which exceeds that level could even be purchased. Consequently, no additional periodic monitoring is proposed.

6. SIP Rule 406, Carbon Monoxide (condition III.A.1.e). This rule limits emissions to 2000 ppm. If warranted, periodic monitoring could be accomplished through in-stack monitors or stack testing. Internal combustion engines are not subject to this standard. As mentioned earlier, all of the refinery's boilers and heaters have extremely high combustion efficiency. As can be seen from the 'CO ppm' data in the efficiency calculation in attachment B, none of these units even approach the 2000 ppm standard. Testing for carbon monoxide emissions occurs annually. Consequently, no additional periodic monitoring is proposed.
7. SIP Rule 407.H.2, Metal Surface Coating Thinners and Reducers (condition III.A.1.f). This rule prohibits thinning with photochemically reactive solvents. If warranted, periodic monitoring could be accomplished either through recordkeeping of the coatings and thinners used and their material data safety sheets (MSDS) or laboratory testing of each thinners mixed with metal part coatings. Condition III.B.1.y to the permit will require recordkeeping sufficient to show that non-photochemically reactive thinners and reducers are used by both ConocoPhillips and their contractors for metal surface coatings. Note that condition III.A.2.k, which limits the applicability of the permit to the refinery and carbon plant properties, is intended to satisfy any concerns that ConocoPhillips might be liable for coatings applied off-site by contractors.
8. SIP Rule 407.H.3, Architectural Coatings (condition III.A.1.g). This rule prohibits the use of architectural coatings, sold in quart containers or larger, which contain photochemically reactive solvents. It also does not allow the thinning or reducing of those coatings with photochemically reactive solvents. If warranted, periodic monitoring would be same as under item 7 above. Condition III.B.1.z to the permit will require recordkeeping sufficient to show that non-photochemically reactive solvents, thinners, and reducers are used by both ConocoPhillips and their contractors for architectural coatings. Note that District Rule 433, Architectural Coatings, was adopted in 2002 but not submitted for inclusion in the SIP. Consequently, the federal and local requirements are acknowledged to be out of synchronization, but the District does not intend to change that situation at this time.
9. SIP Rule 407.H.4, Disposal and Evaporation of Solvents (condition III.A.1.h). This rule prohibits the evaporation of any more than 1-1/2 gallons of photochemically reactive solvent during disposal. This type of emission might be characterized by allowing open paint cans to dry out prior to disposal so that the can and its contents do not have to be treated as a hazardous waste. If warranted, periodic monitoring could be accomplished through testing of waste solvent content before and after disposal. ConocoPhillips should not allow any solvents to evaporate during disposal, whether those solvents are photochemically reactive or not. Condition III.A.1.h prohibits any evaporation of solvents during disposal. Analysis of waste before and after disposal would be extremely expensive and is not warranted. Consequently, no periodic monitoring is proposed.
10. SIP Rule 422, Refinery Process Turnarounds (condition III.A.1.i). This rule prohibits depressurizing refinery vessels to the atmosphere. If warranted, periodic monitoring could be accomplished through operational and physical verification that all depressurizations occur to the relief and recovery system. Depressurization to the make gas system is standard practice at the refinery and can be verified through a review of ConocoPhillips' standard operating procedures manual. Consequently, no additional periodic monitoring is proposed.
11. SIP Rule 407.C.1.a, Submerged Fill Pipes (condition III.A.1.o). This rule prohibits the filling of any 250 gallon or larger gasoline storage tank without the use of a submerged fill pipe. If warranted, periodic monitoring could be accomplished by inspecting each gasoline storage tank's fill pipe prior to filling it. All gasoline storage tanks at ConocoPhillips have been inspected at one

time or another and had the presence of a submerged fill pipe verified. Consequently, no periodic monitoring is proposed.

12. SIP Rule 424.B.5, Phase I Vapor Recovery (condition III.A.1.p). This rule requires the use of good operating practices when transferring gasoline into a storage tank. If warranted, periodic monitoring could be accomplished through independent observation of each gasoline transfer. Contractor filling of gasoline storage tanks are already required to use good operating practices by ConocoPhillips' safety department. Consequently, no periodic monitoring is proposed.
13. SIP Rule 416, Degreasing Operations (condition III.A.1.q). This rule has certain equipment requirements and requires the use of good operating practices when using cold solvent degreasers. If warranted, periodic monitoring could be accomplished through independent observation of each degreasing operation. None of this equipment in use at the refinery is significant enough to require a District permit and the equipment's use is already adequately monitored by ConocoPhillips' safety department. Consequently, no periodic monitoring is proposed.
14. SIP Rule 501.A, Open Burning (condition III.A.1.r). This rule prohibits the burning of outdoor open fires except for fire fighting training purposes. If warranted, periodic monitoring could be accomplished by independent observation of the refinery as a whole. ConocoPhillips has consistently sought and obtained permission for fire fighting training burns and has never been known or found to have lit open outdoor fires for any other reason. Based on such a good track record of compliance, no periodic monitoring is proposed.
15. There is a NO<sub>x</sub> emission limitation for the B-506 boiler that stems from NSPS subpart Db (condition I.A.1). This unit is source tested annually and employs an oxygen sensor that is monitored by the operators using the Distributed Control System (DCS). If warranted, periodic monitoring could also include in-stack continuous emissions monitors. The oxygen concentration in the stack of any given unit is an excellent surrogate for NO<sub>x</sub> emissions because stack O<sub>2</sub> directly affects flame temperature and excess air, which the formation of NO<sub>x</sub> is directly dependent upon. Operational procedures ensure that boiler O<sub>2</sub> is consistently and tightly controlled to the same level found during the annual compliance testing. Consequently, compliance with the stack NO<sub>x</sub> limitation can be inferred on a continuous basis at the operator's panel and, therefore, no additional periodic monitoring is proposed.

**VI. Compliance Assurance Monitoring (CAM):** 40CFR64.5.a.3 requires that CAM be addressed in Title V permit renewal applications. ConocoPhillips has summarized their applicability analysis on page 25 of their application. Their conclusion was that, as of the date of application, CAM applied to the following four emission limitation groups.

1. Sulfur Dioxide from the B-2A/B and B-102A/B heaters. Since the application was filed, the permit has been revised to delete the B-2A/B applicability (conditions I.A.3&4 are now District-only enforceable).

The B-102A/B heaters are eligible for an exemption from CAM under 40CFR64.2.b.1.vi because the AN-603 instrument qualifies as a continuous compliance determination method. That instrument monitors continuously for hydrogen sulfide in the fuel gas to ensure compliance with 40CFR60, Subpart J, upon which the emission limitation that triggers the CAM evaluation is based. Therefore, CAM does not apply to these four heater units.



2. Sulfur Dioxide from the B-505 boiler. Since the application was filed, the permit has been revised to delete this B-505 applicability (conditions I.A.9 is now District-only enforceable). Therefore, CAM does not apply to this boiler unit.
3. Particulate Matter from the carbon plant's cooler stack. Emissions are limited to a sliding scale of pounds per hour, based on process rate, and 0.3 gr/dscf as indicated in State Implementation Plan (SIP) Rule IV.113 (see page 47 of the application). ConocoPhillips has proposed to monitor the multiclone pressure drop and to watch for a visible moisture plume at the cooler stack on a daily basis to satisfy CAM. Under 40CFR64.3.b.4, the frequency of that monitoring depends on the post-control potential to emit (PTE). Four readings per hour are required if the PTE is >100 tpy and daily readings are allowed if PTE is <100 tpy. Based on the average exhaust flow rate observed during the cooler's 2002 compliance test, its PTE is estimated to be as follows.

$$PTE_{PM} = 8627 \text{dscfm} * 0.3 \text{gr/dscf} * 60 \text{min/hr} * 8760 \text{hr/yr} / 7000 \text{gr/lb} / 2000 \text{lb/ton} = 97 \text{tpy}$$

With a PTE of 97 tpy, daily monitoring of the cooler stack is allowed. The CAM Technical Support Document (TSD) includes an example (appendix B.4a) of acceptable monitoring for particulate matter from a wet scrubber that calls for hourly recording of scrubber differential pressure. The refinery's control equipment consists of a multiclone followed by a wet scrubber. In light of the fact that the multiclone has no moving parts and that any significant reduction in its efficiency would be expected to occur slowly, monitoring of the differential pressure on a per-shift basis (every eight hours) will be considered to satisfy CAM. The per-shift basis is also preferred over the daily basis proposed by the applicant because relieving operators are required to take stock of all operating conditions under their control when beginning their shift and this will simply formalize that current effort to ensure that the control equipment is operating properly. In addition, a per-shift monitoring frequency should ensure that several different individuals will perform the observations on any given day, which should enhance objectivity.

There currently is no differential pressure monitor in use at the wet scrubber. The physical environment at this device is very hostile for instrumentation because of the multiclone's high exhaust temperature and the fine nature of fugitive particulate matter locally (i.e., equipment in the area tends to be covered with a fine black powder). Therefore, visual monitoring of the exhaust for a consistent moisture plume and of water flow to the scrubber drain on a per-shift basis will be considered to satisfy CAM. The same reasons noted above for observations on a per-shift basis apply here, as well.

Consequently, the proposed monitoring on a per shift basis is accepted as satisfying CAM for the particulate emission from the cooler stack. The following table cross-references the CAM requirements to their respective proposed permit conditions.

40CFR64	Description	Condition(s)
6.c.1	approved monitoring approach	III.E.23.a.1
6.c.2	definition of exceedance	III.E.23.a.9; I.B.11
6.c.3	obligation to monitor	III.B.2.a.3,4,&5; III.D.5.b
6.d	compliance schedule	III.E.23.a.3
7.a	begin monitoring	III.E.23.a.2,3,&4
7.b	proper maintenance	III.E.23.a.6
7.c	continued operation	III.E.23.a.2,3,4,&5
7.d.1	response to exceedances	III.E.23.a.8
7.e	monitoring improvements	III.E.23.a.10
9.a	reporting	III.B.4.c.13
9.b	recordkeeping	III.B.1.ah

- a. Condition I.A.17, which limits cooler PM emissions, has been modified to include the process-rate dependent mass emission rate limitation that appears in SIP Rule IV.113.2. Listing both the grain loading limitation and the mass emission rate limitation in the emission limitation section is redundant to conditions III.A.1.c.1&2 respectively in the generically applicable requirements section. However, testing contractors continue to focus on the emission limitation section alone when preparing their annual testing plans, to the point of overlooking requirements elsewhere in the permit. Consequently, the District has adopted the strategy of specifically including all of the emission limits that undergo periodic compliance evaluation in the emission limitation section, even if it means duplication. Non-compliance with any such limit that is duplicated in the permit should only result in a single violation, rather than a violation for each condition that lists the limit.
  - b. Condition III.B.2.h, which requires annual calibration of several instruments, including the multiclone's differential pressure indicator, has been modified to require calibration stickers. This is intended to allow an observer to easily discern if an instrument has been calibrated or not.
4. Particulate Matter from the carbon plant's cold stack. As with the cooler stack above, emissions from the cold stack are limited to a sliding scale of pounds per hour, based on process rate, and 0.3 gr/dscf as indicated in State Implementation Plan (SIP) Rule IV.113 (see page 52 of the application). A combination of an increased particulate matter detector (broken bag) for filterable particulate and parametric monitoring based on a regression analysis for condensible particulate has been proposed to satisfy CAM. The latter would be subject to the APCO's approval and would correlate green coke sulfur content and feed rate to estimate sulfuric acid emissions. Those two metrics are the primary determinants of the cold stack's condensible particulate matter.

Under 40CFR64.3.b.4, the frequency of this monitoring depends on the post-control potential to emit (PTE). As noted earlier, four readings per hour are required if the PTE is >100 tpy and daily readings are allowed if PTE is <100 tpy. Based on the average exhaust flow rate observed during the cold stack's 2002 compliance test, its PTE for particulate matter is estimated to be as follows.

$$PTE_{PM} = 61987 \text{dscfm} * 0.3 \text{gr/dscf} * 60 \text{min/hr} * 8760 \text{hr/yr} / 7000 \text{gr/lb} / 2000 \text{lb/ton} = 698 \text{tpy}$$

With a PTE of 698 tpy, at least four readings per hour are required. The increased particulate monitoring proposed would be on a continuous basis. The CAM Technical Support Document (TSD) includes an example (appendix B.1e) of acceptable monitoring for particulate matter from a process baghouse that calls for bag leak detection. The refinery's proposal meets all of the

suggested criteria and is, therefore, accepted as meeting CAM for the emission limits of concern from the cold stack.

The following table cross-references the CAM requirements to their respective proposed permit conditions.

40CFR64	Description	Condition(s)
6.c.1	approved monitoring approach	III.E.24.e.1
6.c.2	definition of exceedance	III.E.24.e.10
6.c.3	obligation to monitor	III.B.2.a.6; III.B.2.b.4&5; III.D.5.a
6.d	compliance schedule	III.E.24.e.5
7.a	begin monitoring	III.E.24.e.2,3,4,&5
7.b	proper maintenance	III.E.24.e.7
7.c	continued operation	III.E.24.e.2,3,4,&5
7.d.1	response to exceedances	III.E.24.e.9
7.e	monitoring improvements	III.E.24.e.11
9.a	reporting	III.B.4.a.8; III.B.4.c.14
9.b	recordkeeping	III.B.1.ai

**VII. Maximum Achievable Control Technology (MACT) Requirements.** The refinery is potentially subject to three proposed standards and is subject to one new MACT standard that have been drafted since the initial Title V permit issuance. On May 14, 2002, ConocoPhillips submitted a Part 1 MACT amendment to their as yet unfiled renewal application in response to the federal Clean Air Act (CAA) section 112(j) “MACT hammer.” The three standards identified as being potentially applicable to the refinery were those for internal combustion engines, process heaters, and non-gasoline storage tanks. In April 2002, Subpart UUU was promulgated and affects the refinery’s sulfur plants.

1. Reciprocating Internal Combustion Engines (RICE). 40CFR63, subpart ZZZZ, was proposed on November 26, 2002, for this source type. In accordance with section 63.6590.b.2.ii, only those RICE rated at 500 hp or greater are subject, however. All of the refinery’s engines are less than that size so this MACT standard does not apply. Note that, if this standard was found to applied, a Part 2 MACT application would be required by April 28, 2004 (FR72882, Vol 67 -December 9, 2002).
2. Industrial, Commercial, and Institutional Boilers and Process Heaters. 40CFR63, subpart DDDDD (D<sup>5</sup>), was also proposed on November 26, 2002, for this source type. While many of the combustion devices at the refinery will likely be subject to this standard (>10 mmBtuh with capacity factor >10%), there are few substantive requirements and no emission limitations for those existing units. Specifically, proposed 40CFR63.7500.a.3 would require compliance with the work practice standards of Table 3, but there are no requirements for existing, large, gaseous fuel-fired units listed in that table. In addition, existing units are allowed three years following the effective date to comply (40CFR63.7495.b). New units have a CO emission limit of 400 ppm@3%O<sub>2</sub> and a continuous CO emissions monitoring requirement to ensure compliance. 40CFR63.7545.a and 40CFR63.9.b.2 would require an initial notification of applicability within 120 days of the effective date of the standard. There should be no ongoing notifications or reports for existing units under 40CFR63.9.h.3 because no emission limitations apply. A startup, shutdown, and maintenance plan (SSMP) would be required to be submitted under 40CFR63.7505.b and 40CFR63.6.e.3.i within three years of the standard’s effective date. 40CFR63.7555.a.1 requires that a copy of the initial notification and any records required by the SSMP be retained. 40CFR63.7555.d.2 also requires a record of daily hours of operation.

If the proposed standard is not finalized by April 28, 2004, ConocoPhillips must submit a Part 2, case-by-case MACT proposal to the District. Consequently, conditions are proposed here in the permit's future effective section that would require either an initial notification of applicability or a part 2 MACT application, depending on subpart D<sup>5</sup>'s promulgation date (III.F.2.a).

3. Organic Liquids Distribution (non-Gasoline). 40CFR63, subpart EEEE (E<sup>4</sup>), was proposed on April 2, 2002. The refinery's permitted crude oil throughput of 16 million barrels per year (condition I.B.1.b) exceeds the MACT trigger of 0.17 million barrels per year (40CFR63.2334.b). Therefore, at least the crude oil storage operation would be subject to the standard. The refinery's gas oil and pressure distillate storage tank operations may also be subject based on whether or not they contain >5% of the listed HAPs. As noted above, compliance is required within three years of the standard's effective date, which has not yet been established (40CFR63.2342.b). Initial notification would also be required within 120 days of that effective date (40CFR63.2382.b and 63.9.b.2). The existing use of primary and secondary seals on crude oil tankage would likely comply with 95% emission reduction requirement that is specified in Table 2, category 2, as required by 40CFR63.2346.a. Tables 3, 4, 5, & 6 have no requirements for storage tanks with rim seals. Table 7, category 1, would require a tank seal inspection to show initial compliance within three years of the standard's effective date. Table 10, category 2, would require periodic inspection of the tanks seals and Table 11 outlines semiannual and startup, shutdown, and malfunction plan (SSMP) reporting requirements. If gas oil is found to be subject to the standard, the existing single seal systems would likely have to be upgraded with secondary seals. The existing vapor recovery system used for pressure distillate storage should be more than adequate to satisfy the 95% criteria, if that material is found to be subject to the MACT standard. 40CFR63.2350.c and 63.6.e.3 would require an SSMP. 40CFR63.2390.a.1 would require that copies of the initial notification and any records required by the SSMP be retained.

If the proposed standard is not finalized by October 30, 2003, ConocoPhillips must again submit a Part 2, case-by-case MACT proposal to the District. Consequently, conditions are proposed here in the permit's future effective section that would require either an initial notification of applicability or a part 2 MACT application, depending on subpart E<sup>4</sup>'s promulgation date (III.F.2.b).

4. Petroleum Refineries: Sulfur Recovery Units. 40CFR63, subpart UUU, was promulgated on April 11, 2002. The two sulfur recovery units (process E-1 as described in permit section II.B.9) and tail gas unit (process K as described in II.B.15) are subject to this standard. Emissions from the latter are already subject to and in compliance with 40CFR60, subpart J, which also constitutes the emission requirement under this MACT standard. Each of the two sulfur recovery plants, however, currently utilize a bypass line to their respective B-602 incinerator whenever the tail gas unit is unavailable. ConocoPhillips has elected to comply with Option 2, which is a 300 ppm total reduced sulfur (TRS) limit, at the B-602s as allowed under table 29-3 to the MACT.

Note that this MACT standard appears to be intended to control TRS with little regard for the resulting SO<sub>2</sub>. While the first option for compliance contains both a TRS and an SO<sub>2</sub> emission limit, the second option, which was chosen by ConocoPhillips, only contains a TRS emission limit. The basic approach in the latter calls for incineration of the sulfur plant exhaust to ensure that any TRS is oxidized to SO<sub>2</sub>.

Sulfur plant exhaust is required to be monitored for compliance with the TRS limit. Table 31-3 to the MACT allows for either continuous emissions monitoring or continuous parametric monitoring. During normal operations, when the two sulfur plants are vented to the tail gas unit and its B-702 incinerator, the existing AN-1707/1709 monitor (just upstream the B-702) has been proposed for

continuous monitoring. During tail gas unit turnaround, when the sulfur plants are vented to the B-602 incinerators through their respective bypass line, new parametric monitors at the B-602s incinerators have been proposed to ensure compliance. While the District would prefer to have emissions monitoring on the B-602s, the infrequent use of those units to control sulfur plant exhaust is judged insufficient to justify the expense of such equipment.

Compliance is required by April 11, 2005, but the deadline for performance testing of the monitoring equipment isn't until 150 days later on September 8, 2005. The District is proposing to include a series of conditions related to the MACT in the future effective section of the permit. This approach is intended to preclude having to reopen the permit when the MACT becomes effective. The future effective conditions are designed to be activated automatically on the compliance dates included.

The following table cross-references the various MACT requirements to their respective proposed future effective permit conditions.

<b>40CFR63</b>	<b>Description</b>	<b>Condition(s)</b>
1562.b.3&4	subject processes	III.F.3.a
1563.b	compliance date	III.F.3
1568.a.1	emission limitations	III.F.3.b.i & III.F.3.c.ii.a
1568.a.2	operational limitations	III.F.3.b.ii & III.F.3.c.ii.d
1568.a.3	operational, maintenance, & monitoring plan (OMMP)	III.F.3.f
1568.b.1	install, operate, & maintain cont. mon.	III.F.3.b.iii, III.F.3.c.ii.b
1568.b.2	conduct performance testing	III.F.3.d
1568.b.3	site-specific operational limits	III.F.3.d.1
1568.b.5	emission limitation init. compliance	III.F.3.d
1568.b.6	work practice std. init. compliance	III.F.3.d
1568.b.7	notification of compliance	III.F.3.e
1568.c.1	emission limitation compliance	III.F.3.b.i
1568.c.2	work practice std. compliance	III.F.3.b.ii
1569.a.1.iv	bypass line vented to control	III.F.3.c.i
1569.a.3	OMMP	III.F.3.f
1569.b.2	emission limitation init. compliance	III.F.3.e
1569.b.3	work practice std init. compliance	III.F.3.e
1569.b.4	notification of compliance	III.F.3.e
1569.c.1	emission limitation compliance	III.F.3.c.ii.a
1569.c.2	work practice std. compliance	III.F.3.c.ii.b
1570.a	operate in compliance	III.F.3.j
1570.c	minimize emissions	III.F.3.g.viii & III.F.3.l
1570.d	startup, shutdown, & malfunction plan	III.F.3.i
1570.e	operate per SSMP	III.F.3.i.i
1570.f	report deviations	III.F.3.h.ii
1571.a	conduct perf. test & report by 9-8-05	III.F.3.d&e
1571.b	conduct perf. tests per 63.7&8	III.F.3.d.iv
1572.a.1	operate & maintain cont. mon.	III.F.3.b.iii
1572.a.2	continuous monitor perf. test.	exempt, already in use for NSPS
1572.c	install, operate, & maintain parametric monitoring	III.F.3.c.ii.b

(continued)

## MACT Cross-reference (continued)

40CFR63	Description	Condition(s)
1572.d.1	continuously monitor	III.F.3.c.ii.c
1574.a.2	perf. test. notification	III.F.3.d.iii
1574.a.3	notification of compliance status	III.F.3.e
1574.d	addition info for notification	III.F.3.e
1574.f	OMMP	III.F.3.f
1575.a	applicable reports	III.F.3.h
1575.b	semi-annual reports required	III.F.3.h
1575.c	report content	III.F.3.h
1575.c.4	no deviations info	III.F.3.h.i
1575.d	deviation info	III.F.3.h.ii
1575.e	deviation info involving cont. mon.	III.F.3.h.ii
1575.f.1	submit copy of performance tests	III.F.3.h.iii
1575.h.2	report actions inconsistent with SSMP	III.F.3.h.iv
1576.a.1	retain copies of reports	III.F.3.g.ii
1576.a.2	retain SSMP data	III.F.3.g.ii
1576.a.3	retain performance test data	III.F.3.g.iii
1576.b	retain cont. mon. data	III.F.3.g.iv
1576.d	retain continuous compliance data	III.F.3.g.v
1576.e	retain OMMP	III.F.3.g.vi
1576.f	record of control system change	III.F.3.g.vii
1576.g	records must be suitable & available	III.F.3.g
1576.h	retain records for 5 years	III.B

### VIII. Non-Federal Minor Changes

1. Sulfur Pelletizing System (application 3347). ConocoPhillips is requesting two corrections to the specifications for the carbon plant's sulfur pelletizing system, as discovered through a recent engineering study. The first concerns the size of the molten sulfur pit and would correct its surface dimensions to 16 feet by 16 feet. The second would correct the maximum process rate to reflect 42.6 tons per hour. While it is unclear how the refinery under-estimated that capacity in their original application in 1991, the most likely cause was an incorrect assumption for material density. Accordingly, equipment description section II.B.28.1 and operational limitation condition I.B.13.a would be changed to reflect the corrected values.
2. Diesel Fuel Specifications (application 3380). The second non-federal minor change would allow any CARB diesel to fuel the reverse osmosis unit (ROU) standby generator engine instead of just on-road CARB diesel. While there would be no difference in emission between burning on-road or off-road diesel, the latter fuel is considerably cheaper and would allow the refinery to save a significant amount money. Accordingly, condition III.E.7.e is proposed to be modified as follows.

“III.E.7.e. Only diesel that is approved for ~~on-road~~ use in California by CARB may be used to fuel the Reverse Osmosis Unit (ROU) emergency standby generator and the emergency water pump engines.”

## IX. Specific Evaluation Notes

1. The Environmental Protection Agency (EPA) requires that all authority to construct conditions be considered federally-enforceable when incorporated into the Title V permit. While the District disagrees with that view, the proposed permit is consistent with EPA's contention. Attachment D includes a copy of all authorities to construct that have been issued since the refinery's initial permit was evaluated. All of the conditions associated with those permit actions are either no longer pertinent and not included here in the proposed permit, or they are included as federally-enforceable requirements.
2. Appendix B of the proposed permit reflects the most recent list of alternative test methods published by the Air Resources Board (January 2, 2003).
3. In October 2000, several changes were made to the performance specifications for the AN-603 (fuel gas H<sub>2</sub>S content) and AN-1707/1709 (tail gas TRS). Excerpts from those specifications are included in attachment B. During operation, instrument drift used to be held to less than 12 ppm for the AN-603 and 8.75 ppm for the AN-1707/1709. Under the revised performance specifications, they're both held to less than 5% of instrument range, which works out to 15 ppm and 17.5 ppm respectively. The new drift standards would be reflected in conditions I.B.14.a&15.a.

During relative accuracy (RA) testing, those two instruments used to be required to meet one of two standards: <10% of the emission standard or <20% of the mean of the relative accuracy readings. Under the new performance specifications, each instrument's RA must be either 10% or 20% depending on whether the average actual emissions during testing were respectively less than or greater than 50% of the applicable standard. The two different RA standards are necessary because the performance specification calls for different calculation methods depending on the relationship of the actual emissions to the emission limits. In other words, the 10% and 20% standards attempt to normalize the RA requirement so that the instrument is not required to be more accurate based on how actual emissions relate to allowed emissions. The new RA standards would be included in conditions I.B.14.b, and 15.b.

The October 2000 performance specification changes also affect conditions for the temporary flare alternative operating scenario to the permit. Conditions III.H.1.b.3.ii & iii concerning drift and RA requirements respectively for the AE-457 H<sub>2</sub>S analyzer would be changed to reflect 21 ppm and either 10% or 20%, depending on values found during the performance test.

4. The tail gas unit's 65 ppm and 383.5 lb/wk TRS limits in condition I.A.14 ensure emissions of less than 10 tpy. EPA's Prevention of Significant Deterioration (PSD) requirements were not triggered when this unit was newly install in 1986 based on the operator's claim that it would not emit more than 10 tpy TRS. Thus, these limits were voluntarily taken to avoid PSD requirements. Consequently, both of these limits will be considered federally-enforceable.

5. Compliance with 40CFR general provisions.

General Provision		Condition(s)
60.7.a.4	change notification	III.C.6.a.1
60.7.b	start-up, shutdown, & maintenance (SSM) recording	III.C.6.a.2 (common NSPS)
60.7.c	excess emis report	III.B.4.b.6
60.7.f	records	III.B.1
60.11.d	good operating practices	III.C.6.b
60.12,61.19, 63.4.b	circumvention	III.A.7
60.13.c	CMS periodic audit	III.D.3
60.13.d	CMS zero and span checks	III.B.2.b.2&3
60.13.e	CMS operation	III.C.8.b/III.E.15.a
60.18	flare operation	III.E.19.d
61.05.c	operate in compliance	III.A.1.s/t
61.05.d	submit reports	III.A.1.s/t.1
61.10.c	changes to initial notification	III.A.1.s/t.2
61.12.c	good operating practice	III.A.1.s/t.3
63.2.c.1/63.4.a.1/ 63.4.a.3/63.4.a.5	operate in compliance	III.C.10
63.4.a.2	submit reports	III.C.10.c.1
63.6.e.1.i	good operating practice	III.C.10.c.2
63.6.e.1.ii	correct malfunctions as soon as practicable	III.C.10.b.2
63.6.e.3	startup,shutdown,malfunction plan	III.C.10.b
63.10.a.4.ii	copies of reports to EPA	III.C.10.c.3
63.10.b.2	records during SSM	III.B.1.aa
63.10.d.5.i/ii	reports	III.B.4.c.11/12

6. District Rule 216 was revised in March 2001 to respond to EPA's interim program approval issues. The following permit changes are proposed as a result of that revision.

- a. New condition III.D.1.b, concerning monitoring procedures and records, would be inserted into the compliance testing section to reflect new Rule 216.F.1.c.3.

“III.D.1.b. A record of compliance testing shall be maintained and shall include at least the following information.

- i. The date, place as defined in this permit, and time of sampling or measurements;
- ii. The date(s) analyses were performed;
- iii. The company or entity that performed the analyses;
- iv. The analytical techniques or methods used;
- v. The results of such analyses; and
- vi. The operating conditions as existing at the time of sampling or measurement.”

- b. Existing conditions III.A.2.a & f, concerning compliance with all applicable requirements, would be combined and revised to incorporate the changes in Rule 216.F.1.f.

“III.A.2.a. ConocoPhillips shall comply with all terms and conditions of this permit. Non-compliance constitutes a violation of the federal Clean Air Act. Continuing non-compliance with any federally-enforceable permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal.”



- c. New condition III.A.2.k, concerning exemptions from permit revision, would be inserted into the standard condition section to reflect new Rule 216.F.1.1.

“III.A.2.k. A permit revision shall not be required to implement processes changes, economic incentives, marketable permits, emissions trading and other similar programs that are provided for elsewhere in this permit.”

7. The refinery has long contended that the cold stack baghouse is oversized to the point that one or more of the modules could be isolated and not affect compliance with particulate emission standards at the discharge. Indeed, the CAM plan submitted with the renewal application proposes to isolate any module with a suspected broken bag for maintenance during the next equipment turnaround (see page 55 of Appl 3322). The District is willing to approve this approach for one of the six modules. Having more than one module isolated for later repair, however, should require the additional scrutiny and control afforded by the Rule 107 breakdown and emergency variance procedures. Consequently, the following proposed condition would consider the need to isolate one module a reportable event, but not a deviation or a breakdown. Isolation of more than one module would be considered a breakdown.

“III.B.3.j. Isolation of one (1) calciner cold stack baghouse module for later repair while green coke is being processed in the calciner shall be reported to the APCO within four (4) hours and shall not be considered a deviation from the requirements of II.B.24.c above. A written report describing when and why the module was isolate and when repair is anticipated shall be included in the next monthly report under condition III.B.4.a below. Isolation of more than one (1) module at a time for later repair while green coke is being processed in the calciner shall be considered a breakdown under District Rule 107.”

8. The District feels the need to clarify the role of this permit’s equipment description section with regard to compliance. The permit system is designed to authorize the use of specific equipment, with the intent being that changes to that equipment requires a modification to the permit. The introductory language to the equipment description section is proposed to be revised as follows, to more clearly state that intent.

“II.B. Specific Equipment. Equipment descriptions are organized by process. Major emission units are listed but all associated valves, flanges, piping, and minor emission units, which are not explicitly identified, are also included in this permit and subject to their respective major emission unit’s requirements. ConocoPhillips is authorized to operate the equipment listed below in the configuration described.”

9. As mentioned earlier, District Rule 433, concerning architectural coatings, was adopted in 2002 as a District-only requirement. To ensure compliance with that rule, the following new condition is proposed.

“III.A.1.w. This facility shall comply with all applicable provisions of District Rule 433, Architectural Coatings.”

10. Administrative amendment application 3317, which was received on September 30, 2002, was already responded to by the District in November of that same year. In item 10 to that application, ConocoPhillips had requested clarification of condition III.A.1.m, concerning notification of operational changes. In its response, the District denied that request because the suggested changes were felt too significant to be considered an administrative amendment. However, we recognize the

merit of ConocoPhillips' request and propose to incorporate it here as a District initiated revision. The condition of interest would be revised as follows.

“III.A.1.m. The APCO shall be notified in writing before any changes are made in the design, construction, or method of operation of this equipment, or any modifications are made to process condition that might increase the emission of air contaminants in excess of existing permit limits, for those emission unit and pollutant combinations with such limits, or that might increase the potential to emit of any air contaminant, for those emission unit and pollutant combinations without current limits.”

11. The tail gas unit TRS monitoring system (AN-1707/1709) does not include an oxygen monitor because that unit has consistently operated at zero percent O<sub>2</sub>. The relief from O<sub>2</sub> monitoring appears in 40CFR60.105.a.6.ii. Compliance with this relief is ensured through condition number III.D.4.e, which requires that the TRS monitoring system sample point be shown to operate at 0% O<sub>2</sub> continuously for three days every two years when tail gas compliance testing is performed.
12. Concerning the inspection and maintenance program in NSPS subparts GGG&VV. The refinery has chosen the option in 40CFR60.483-1 to perform only annual leak checks on valves in gas or light liquid service. This requires that the percentage of leaking valves be maintained at less than 2 percent but relieves the refinery of most of the requirements of 40CFR60.482-7.
13. The long standing allowance to test the refinery's heaters and boilers only once every three years for sulfur dioxide emissions, instead of every year, is founded in the concept that those emissions can be calculated by mass balance. Thus, the triennial compliance testing frequency allowed for periodic verification of those calculations at a reduced cost to the facility. The emission limitations at the tail gas unit combustor, B-702, are sulfur compound related. Consequently, it was decided after the Platform Irene upgrades that triennial compliance determinations at the B-702 in synchronization with other sulfur dioxide emission testing would be acceptable to the District and cost effective for the refinery. However, for reasons lost to history, sulfur dioxide testing at the heaters and boilers occurred two years in a row in 1991 and 1992, but the B-702 was only testing in the first year, 1991. Ever since then, both test series have continued at three year intervals, but out of synchronization. With the refinery's concurrence, the District is proposing to regain synchronization of these two test series by shortening the next test cycle for the B-702 combustor.

In late-1991, the District finalized a Compliance Maintenance Strategy (CMS) with EPA Region IX (see attachment B). Part of that agreement was to conduct a full compliance evaluation of the refinery every two years. To support that effort, all triennial testing cycles in section III.D to the proposed permit have been shortened to biennial. In addition and to clarify which years are test-years for the biennial cycles, the District proposes to include in the pertinent condition those testing years that will occur during the next five-year renewal cycle. Consequently, conditions III.D.4&6 are proposed to read as follows.

**“III.D.4. Biennial Refinery Compliance Testing.**

<b>Process</b>	<b>Condition</b>
B-1,C, D-2,K	At least once every two calendar years, ConocoPhillips shall contract with an independent, or other District-approved, laboratory to conduct tests to determine the: <ul style="list-style-type: none"> <li>a. sulfur dioxide emissions in 2004, 2006, and 2008 from the: [District-only, Rule 206 for B-2A/B and SIP Rule 205 for all others]               <ul style="list-style-type: none"> <li>crude heaters (B-2A/B),</li> <li>coker heaters (B-102A/B), and</li> <li>steam superheaters (B-201A/B);</li> </ul> </li> <li>b. volatile organic compound emissions in 2004, 2006, and 2008 from the B-505 boiler; [District-only, Rule 210.B.1]</li> <li>c. hydrogen sulfide and reduced sulfur compounds in 2003, 2004, 2006, and 2008 in the B-702 stack gas with the combustor on low fire; [SIP Rule 205]</li> <li>d. sulfur dioxide emissions in 2003, 2004, 2006, and 2008 in the B-702 stack gas with the combustor on high fire; and [SIP Rule 205]</li> <li>e. oxygen levels for at least a three (3) calendar day period in 2003, 2004, 2006, and 2008 at the AN-1707/1709 monitor sampling point. [SIP Rule 205]”</li> </ul>

**“III.D.6. Biennial Carbon Plant Compliance Testing.**

<b>Process</b>	<b>Condition</b>
S-2	During 2003, 2005, and 2007, ConocoPhillips shall contract with an independent, or other District-approved, laboratory to conduct tests to determine the rail car loading baghouse emissions of particulate matter. [Rule 210.B.1]”

14. District-only recordkeeping requirement III.B.1.l was coordinated with CAM III.B.1.ah.3 as follows.

“III.B.1.l. Until September 1, 2003, and at least once per day, the pressure drop across the coke calcining kiln, cold side multiclone. Subsequent to September 1, 2003, see condition III.B.1.ah.3 below. [District-only, Rule 206]”

15. Delete District-only recordkeeping requirement III.B.1.ac as redundant to CAM III.B.1.ai.1.

“III.B.1.ac. (deleted) ~~Monthly green coke sulfur content in weight percent.~~ [District-only, Rule 206]

III.B.1.ai.1. Percent sulfur by weight in the green coke feed once per day.”

16. The text and referencing for III.E.7.c was clarified that this federally-enforceable requirement was not intended to apply to the B-505 boiler. District-only requirement III.E.8.d was also added to ensure monitoring of the B-505 boiler.

“III.E.7.c. The Distributed Control System shall monitor and record the fuel flow and steam production from ~~each~~ boilers, B-504 and B-506. All monitoring and recording instruments shall be maintained in good operating order. [SIP Rule 205, ~~except for B-505 steam flow which is, District-only, Rule 206~~]

III.E.8.d. The Distributed Control System shall monitor and record the fuel flow and steam production from boiler B-505. All monitoring and recording instruments shall be maintained in good operating order.

17. The abrasive blasting containment structure described in section II.18.g has been improved through the use of solid walls and ceiling instead of the original 85% opaque screen. A field inspection confirmed that an authority to construct was unnecessary for this change. Consequently, the permit description will simply be updated in this reissuance.
18. The District-only enforceable 45-day seal repair allowance in section III.C.4 has been discovered to be inconsistent with the more stringent 30-day seal repair requirement in condition III.E.11.a.1.i. Consequently, the first condition is proposed to be revised as follows.

“III.C.4.g. Any excessive seal gap shall be repaired within ~~thirty forty-five (3045)~~ calendar days. A thirty (30) calendar day extension may be requested from the APCO if repairs cannot be completed within ~~thirty forty-five (3045)~~ calendar days because they are technically not possible without complete or partial shutdown of the refinery.”

19. A typographical error was discovered in the referencing for condition III.C.4.h, concerning seal inspections following tank turn-arounds. Tank 903 has a federally-enforceable requirement based on the streamlining action described in section IV.1.c.2 above but that inspection is a District-only requirement for all other tanks.
20. Proper operation of the magnesium hydroxide (MgOH) system at the calciner for the control of visible emissions from the cold stack has always been required by condition III.E.24.b. Recent emphasis on this system has resulted in an agreed upon injection rate that constitutes proper operation. Consequently, that District-only enforceable condition is proposed to be revised as follows.

“III.E.24.b. The magnesium hydroxide system shall be kept in proper operating order as indicated by an injection rate of at least 150 ml/min and shall be in use at all times when the baghouse is in operation, except during periodic or corrective maintenance periods of one hour or less.”

- X. Public Comment and EPA Review.** A public notice period inviting comments on ConocoPhillips’ proposed permit was held between February 24, 2003, and March 26, 2003. No comments were received. EPA was also given the opportunity for comments between February 19, 2003, and April 4, 2003. Their letter of April 1, 2003, raised issues with the federal enforceability several conditions that were introduced in section IX.1 above. However, EPA stopped short of raising an official objection and the District disagrees with EPA’s contention. Consequently, the permit will be issued with the disputed conditions as District-only enforceable as proposed.

**XI. Conclusion and Recommendation.** In conclusion, the proposed Title V permit has been found to satisfy all of the requirements of District Rule 216 and the District's Title V permit program. Therefore, it is recommended that this permit be renewed to satisfy those requirements.

Note that third party appeals of the Air Pollution Control Officer's decision to reissue this Title V permit are governed by Health and Safety Code section 42302.1 and EPA has the right to reopen this permit at any time for cause under Rule 216.K.1.d.

David W. Dixon  
Engineering Supervisor

Attachments:

- A - Completeness Evaluation
- B - Supporting Documentation
- C - Process Flow Diagrams
- D - Authorities to Construct Issued since the Initial Permit Evaluation
- E - Public Notice Text

**ConocoPhillips Santa Maria Facility,  
Application 3322**

**Attachment A**

**Completeness Evaluation**

**ConocoPhillips Santa Maria Facility,  
Application 3322**

**Attachment B**

**Supporting Documentation**

**ConocoPhillips Santa Maria Facility,  
Application 3322**

**Attachment C**

**Process Flow Diagrams**



**ConocoPhillips Santa Maria Facility,  
Application 3322**

**Attachment D**

**Authorities to Construct Issued since  
the Initial Permit Evaluation**

**ConocoPhillips Santa Maria Facility,  
Application 3322**

**Attachment E**

**Public Notice Text**